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FORCEnet: Speed to Joint Capability

Presentation to the
**National Defense Industrial
Association**
San Diego, California



Colonel Howard Thomas, HQMC C4, 21 Oct 2004



Commitment to FORCEnet

Headquarters, U.S. Marine Corps

- “FORCEnet is the Department of the Navy’s catalyst for operational transformation. In the realm of network centric warfare and operations, it will enable orders of magnitude increases in combat power to ensure decisive influence and warfighting success across the full spectrum of military operations in the Information age”.
 - **Honorable Hansford T. Johnson,
Secretary of the Navy, Acting
Opening Statement, House Armed Services Committee
Hearing, 26 February 2003**



Marine Corps Perspective

Headquarters, U.S. Marine Corps

- “FORCEnet will serve as an enabler for the capstone concepts of Sea Power 21 and Expeditionary Maneuver Warfare, providing networked combat forces able to successfully perform the operational concepts of Operational Maneuver from the Sea and Sustained Operations Ashore within a complex, joint environment.



FORCEnet is...

Headquarters, U.S. Marine Corps

- The Department of the Navy's component of the Global Information Grid.
- It reflects the Department's information-centric approach for conducting joint warfare in the future.
- An over-arching entity that will bring together communications and data systems capabilities, and through innovation and experimentation, turn the implementation of the Network-Centric environment into reality.



FORCEnet is...

Headquarters, U.S. Marine Corps

- FORCEnet is the **Naval Enterprise IT** environment that brings together the “warfighter” and business/enterprise practices.
- FORCEnet will carry out the policies and capabilities requirements for emerging **Naval** interoperable systems to replace former legacy systems.
- Align and integrate warriors, sensors, command & control, platforms and weapons into a globally networked, distributed combat force.
- Require Navy and Marine programs to be changed to provide or enable network centric warfare and leverage NCES and GIG-BE capabilities.



The Big Picture

Global Information Grid

Headquarters, U.S. Marine Corps

GIG

Joint Enterprise

DISN

GIG-BE

GBS

STEP/TELEPORT

TSAT

JTRS

Air Force Enterprise

C2 ConstellationNet

Army Enterprise

LandWarNet

Naval Enterprise

FORCENet
(NMCI+ADNS+MCEN)

WARFIGHTING

OPERATIONAL
SUPPORT

INFOSTRUCTURE
ConstellationNet

WARFIGHTING

OPERATIONAL
SUPPORT

INFOSTRUCTURE
LandWarNet
ARNet
GuardNet

WARFIGHTING

OPERATIONAL
SUPPORT

INFOSTRUCTURE
Naval Enterprise

TDL Roadmap
Execution

WIN-T

SOF Network (WAN + SCAMP1 + MBITR)

Navy Marine Corps Intranet

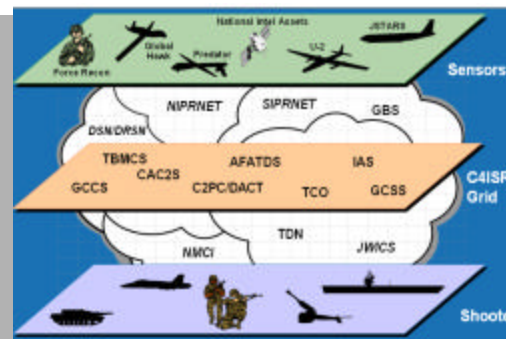
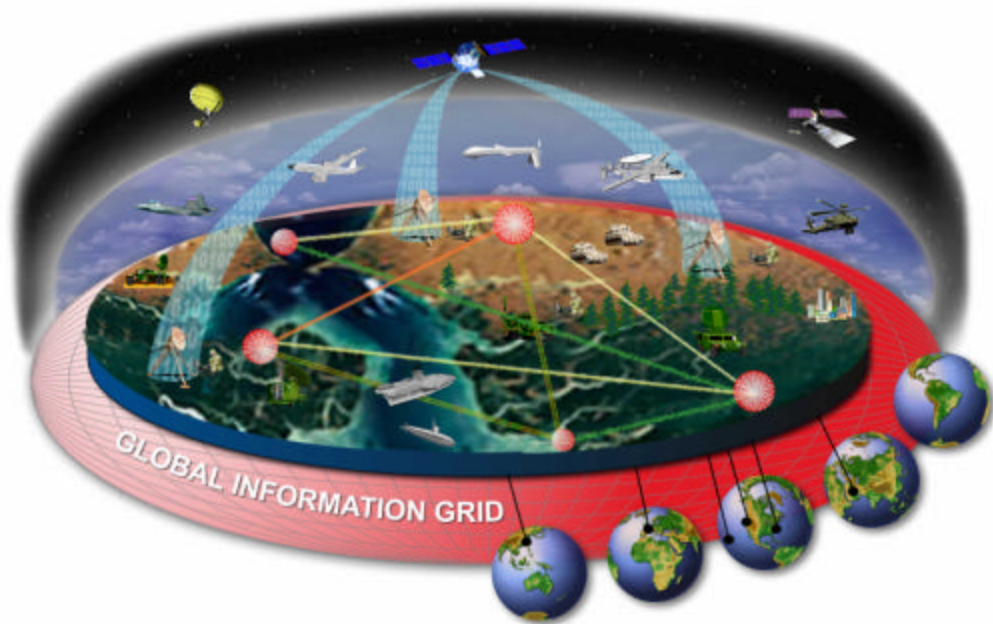
Standards and Protocols (IPv6) + NetOps



The FORCEnet Goal

Headquarters, U.S. Marine Corps

*The Right Information
To The Right People
At The Right Time*



People + Training + Integrated Systems = Warfighting Capability



FORCEnet Provides...

Headquarters, U.S. Marine Corps

- Strategic Focus, Analytical Rigor and Disciplined Investment Planning to Rapidly Develop, Test and Deliver Interoperable Systems Across the Spectrum to include Combat Power and the Supporting Elements that allow it to happen.
- An Integration of all force elements throughout the battlespace including warfighters afloat and ashore.



FORCEnet Provides...

Headquarters, U.S. Marine Corps

- An Open Architecture that provides the basis for interoperability with joint, allied, coalition forces.
- The “last tactical mile C4” capability to allow increase in wideband communication connectivity to maneuver units.



Marine Corps fully participates and supports FORCEnet

Headquarters, U.S. Marine Corps

- Marine Corps Combat Development Command (MCCDC)
- HQMC – C4
- Marine Corps Systems Command (MCSC)
- Marine Corps Warfighting Lab (MCWL)

Through this partnership the Marine Corps
contribution to FORCEnet is through the
Marine Corps Enterprise Network: MCEN



FORCEnet and the MCEN

Headquarters, U.S. Marine Corps

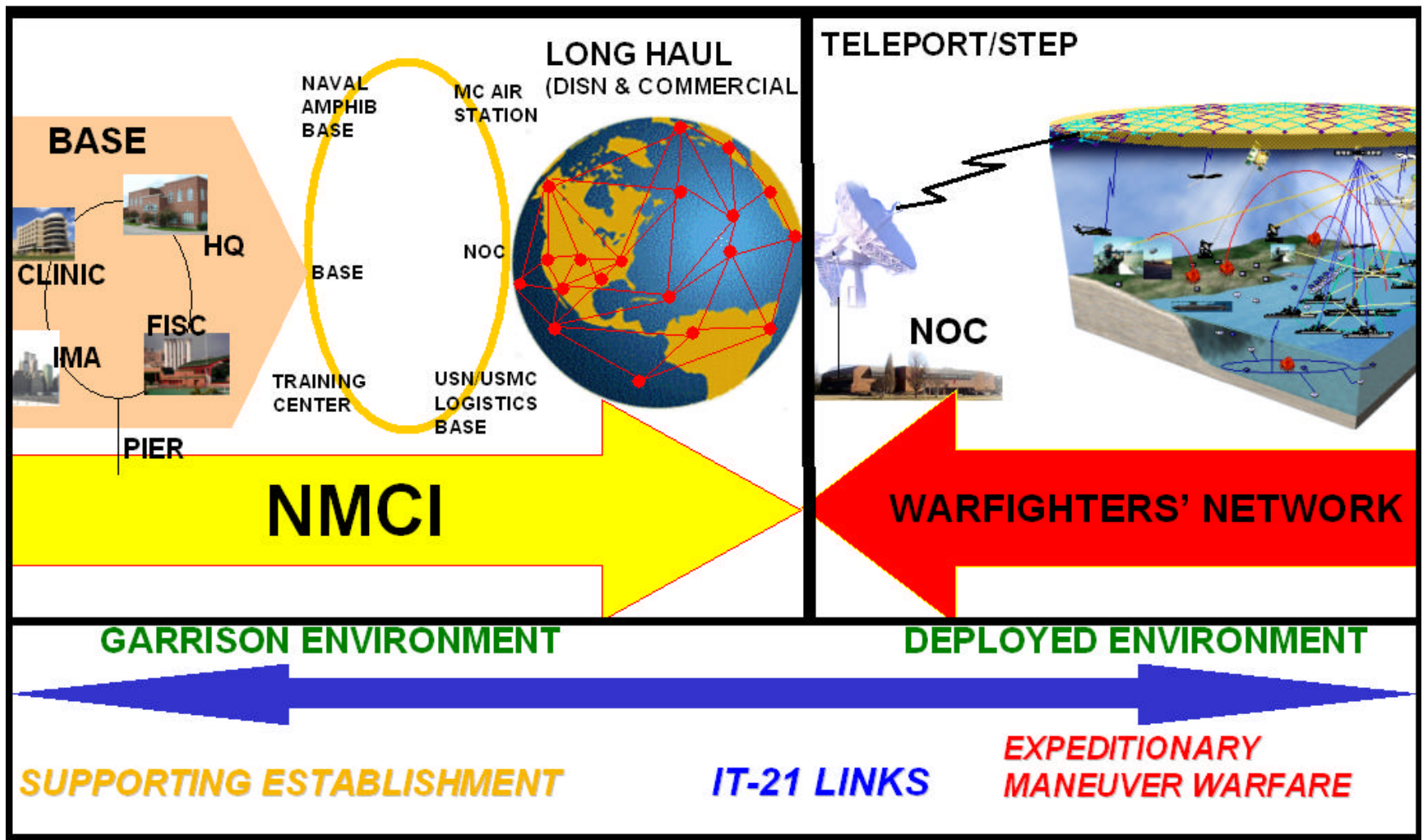
- “The Marine Corps Enterprise Network, consisting of the NMCI and the MAGTF Tactical Data Network, is the Marine Corps contribution to FORCEnet, our naval architecture construct, and the Global Information Grid. Programmed enhancements to MCEN will provide a significant contribution to FORCEnet...Our goal is to create a enterprise shared data environment that leverages DoD, Joint and Naval initiatives resulting in greater data standardization and interoperability”.



How we are Building The Network

Marine Corps Enterprise Network

Headquarters, U.S. Marine Corps





FORCEnet and Industry

Headquarters, U.S. Marine Corps

- Industry can foster FORCEnet by providing emerging technologies in conjunction with FORCEnet requirements, open and non-proprietary net-centric solutions, raising net-centric operations to the next level by focusing on applications (e.g...)
- To facilitate the culture shift, integrate an intelligent agent to alert the user when new information is available
- Look to integrate voice-to-text between chat users with different bandwidth constraints
- When operating with coalition/allied forces, integrate multiple security levels for web, chat and other forms of information exchange



Summary

Headquarters, U.S. Marine Corps

- The US Marine Corps supports the FORCEnet concept.
- The Marine Corps conduit to FORCEnet is through MCEN.
- MCEN, through FORCEnet will integrate with the GIG and allow interoperability with the other services and allies.



Summary

Headquarters, U.S. Marine Corps

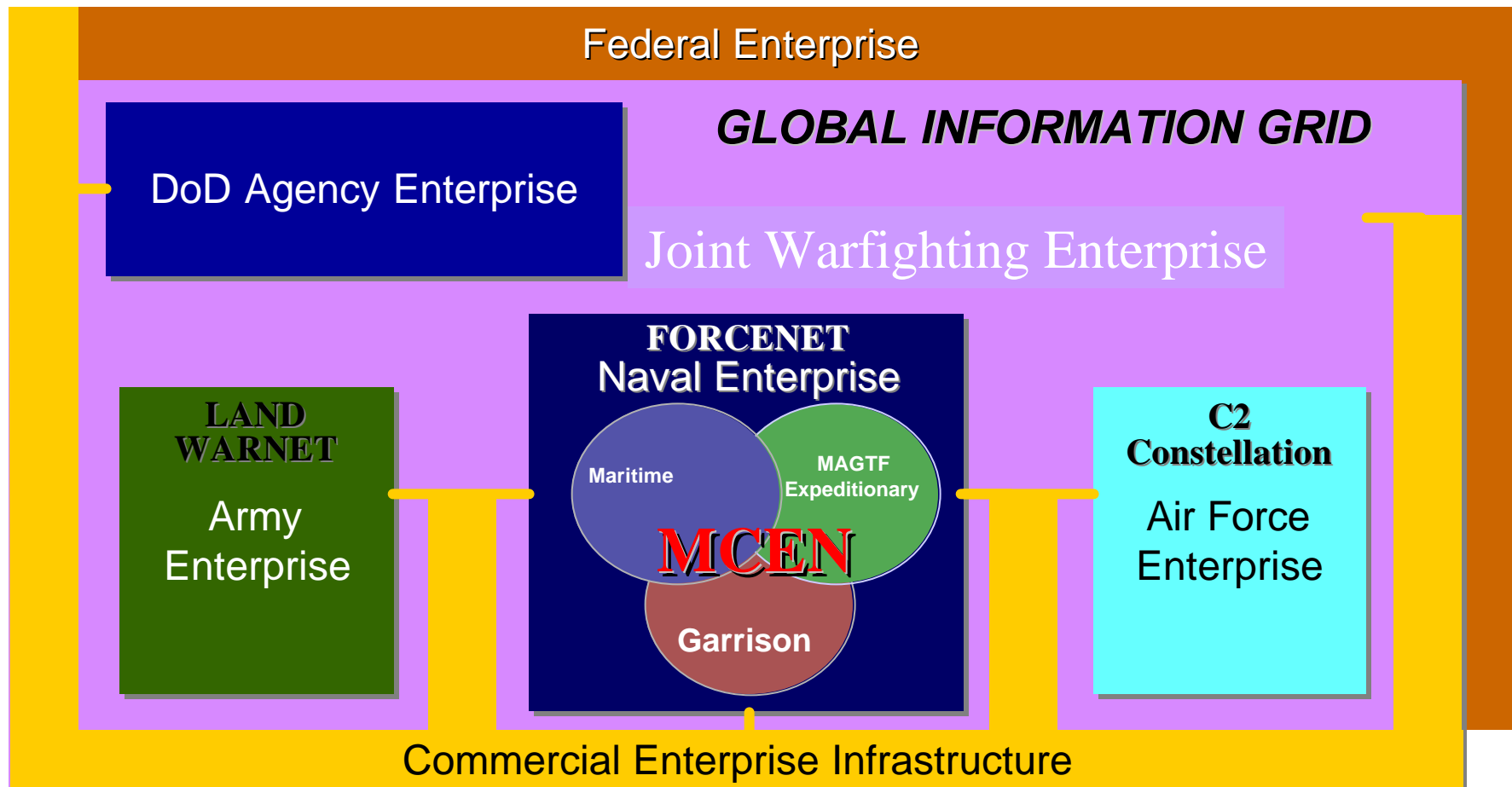
- FORCEnet operations require a highly networked force supported by advances in Information Age capabilities.
- FORCEnet Development is Continuous
 - It has been in existence in one form or another since the first semaphore flag was raised.
 - It will continue to evolve as technologies will allow
- Goal: Success by 2015-2020 timeframe and beyond.



What it will look like?

Headquarters, U.S. Marine Corps

Architecture Framework





The Big Picture

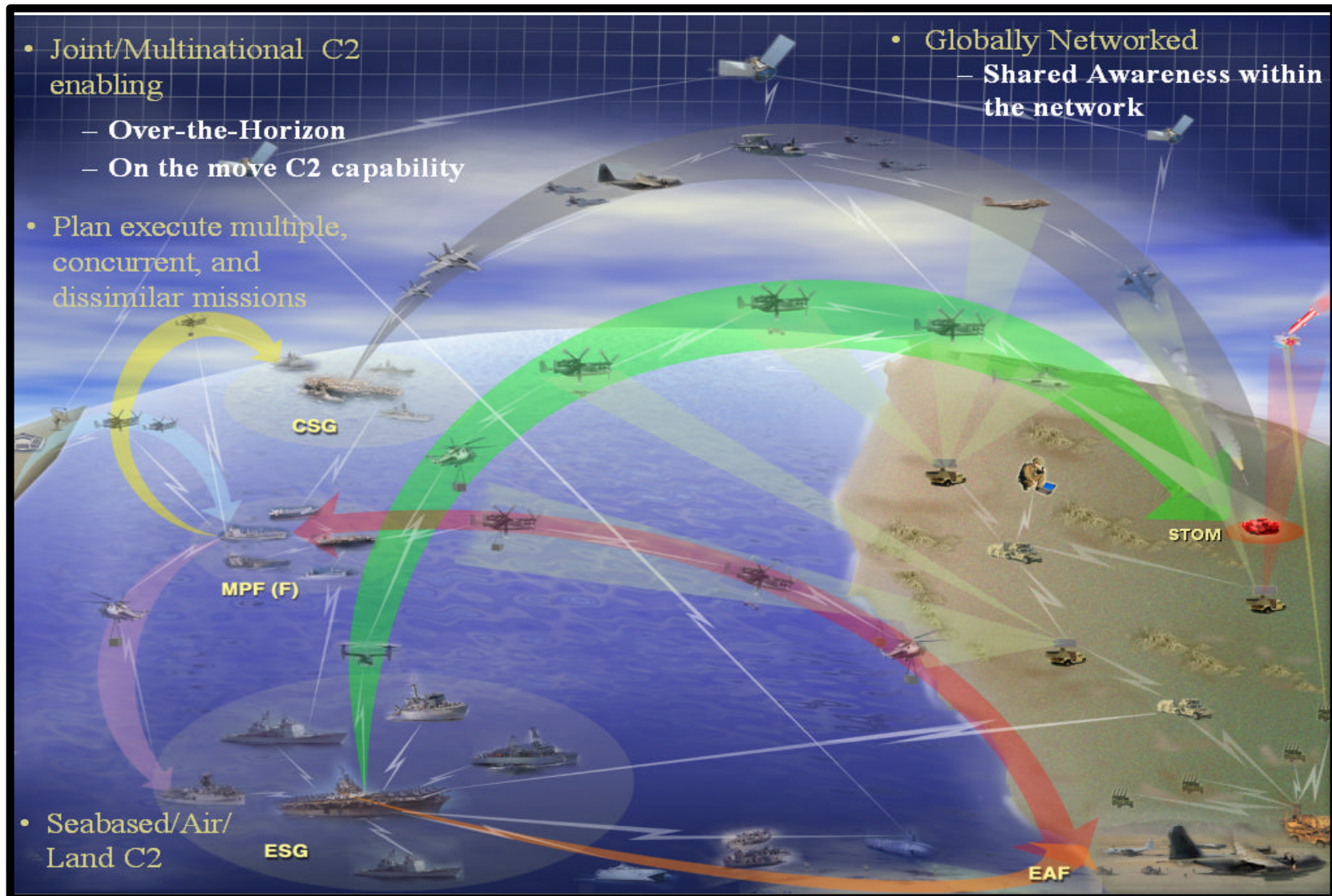
Expeditionary by Design...(eXnet)

Headquarters, U.S. Marine Corps

- Joint/Multinational C2 enabling
 - Over-the-Horizon
 - On the move C2 capability

- Plan execute multiple, concurrent, and dissimilar missions

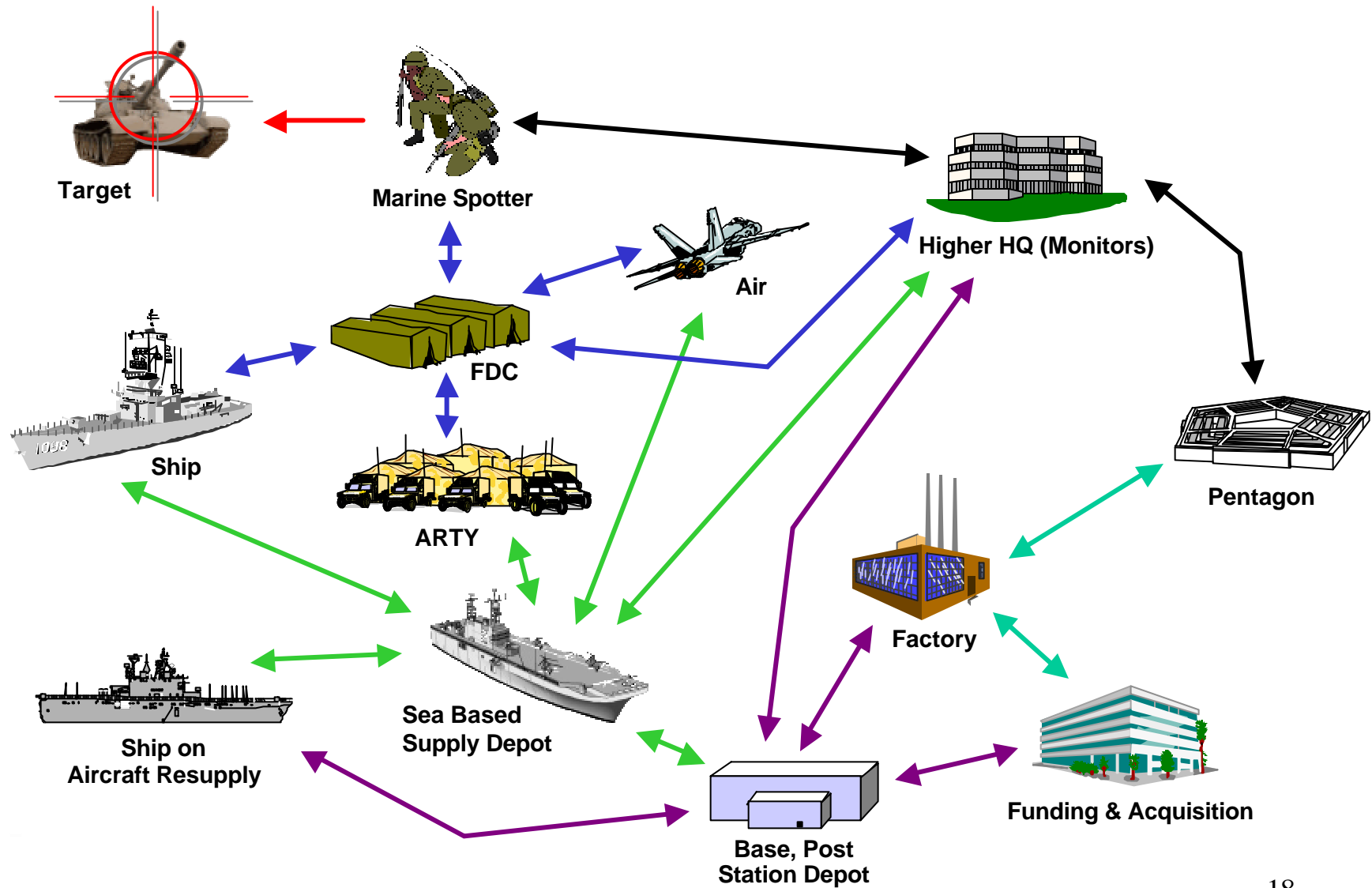
- Globally Networked
 - Shared Awareness within the network





In a Perfect World

Headquarters, U.S. Marine Corps





Summary

Headquarters, U.S. Marine Corps

➤ **FORCEnet is NAVAL**

“Lethal weapons and advanced technologies provide us unique advantages, but educated warriors ultimately determine victory in combat, not machines.”

**General Hagee
CMC**



FORCEnet Supports the Pillars

Headquarters, U.S. Marine Corps

Sea Shield

Sea Trial

Sea Warrior

Sea Enterprise

FORCEnet

Sea Strike

- *Sea Strike* – Projecting Precise and Persistent Offensive Power
- *Sea Shield* – Projecting Global Defensive Assurance
- *Sea Basing* – Projecting Joint Operational Independence

Sea Basing

- *Sea Trial* – Process of Innovation
- *Sea Warrior* – Investing in Sailors
- *Sea Enterprise* – Resourcing tomorrow's Fleet

Implemented by a Global Concept of Operations



The Marine Corps and FORCEnet

Headquarters, U.S. Marine Corps

- The Marine Corps fully supports and participates in FORCEnet through the:
 - Marine Corps Combat Development Command (MCCDC)
 - HQMC – C4
 - Marine Corps Systems Command (MCSC)
 - Marine Corps Warfighting Lab (MCWL)



Navy-Marine Corps FORCEnet Team

Headquarters, U.S. Marine Corps

- Partner with Navy NETWARCON, SPAWAR, OPNAV and Naval Warfare Development Command
- Together the Navy-Marine Corps TCAM are developing the:
 - FORCEnet Campaign Plan
 - FORCEnet Command and Control Concept
 - FORCEnet Architecture Development with SPAWAR
- And...together we participate in the:
 - FORCEnet OAG with NETWARCOM
 - FORCEnet PR-07 Wargame with OPNAV N704 (and soon ...POM-08)
 - And numerous other venues to include the Office of Naval Research



FORCEnet and USMC Expeditionary Capabilities

Headquarters, U.S. Marine Corps

- MCEN Enhancements
- Information Assurance
- Multiple Levels of Security
- Transformational Communications Architecture
- Net-Centric Enterprise Service
- GIG Bandwidth Expansion for access to designated echelons
- Common Operational Picture
- Over the Horizon Communications (including STOM-Bridge)
- Systems Interoperability - Garrison & Deployed w/other Services
- Standard Collaborative Tool Sets
- Blue Force Tracking/Combat ID



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Headquarters, U.S. Marine Corps

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Marine Corps FORCEnet Efforts

Headquarters, U.S. Marine Corps

- MCEN
- DoD Related Programs
- OEF/OIF Lessons Learned
- STOM Bridge
- ELMR
- JWID
- Coordination with other Services
- Engagement with JFCOM
- Industry/NDIA support



What is MCEITS?

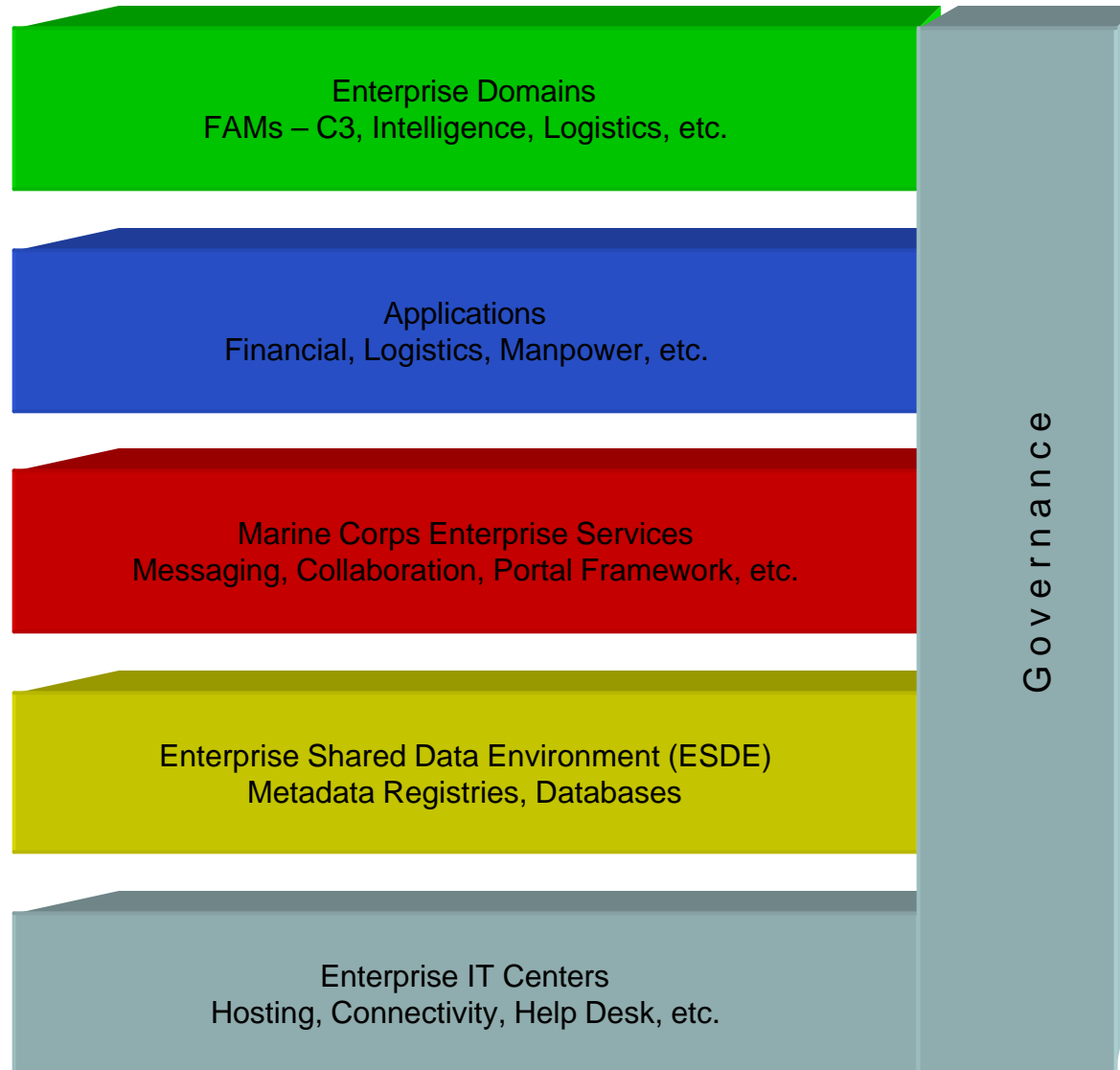
Headquarters, U.S. Marine Corps

- A USMC “Services Oriented Architecture”
 - IT infrastructure (enterprise IT centers)
 - Enterprise Shared Data Environment (ESDE)
 - Enterprise access (Portal)
 - Enterprise IT services
- IT Investment and Realignment
- A FY06 Program of Record
 - USMC implementation of net-centric operations
 - Leverage and extend joint IT transformational initiatives



MCEITS Components

Headquarters, U.S. Marine Corps





Summary

Headquarters, U.S. Marine Corps

- The Navy and Marine Corps have been building FORCEnet for 228 years now



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